## **Appendix J - Cumulative Effects**

## Introduction

This appendix discloses actions considered in the cumulative effects sections of each resource in Chapter 3. In most cases, past and onoing activities are incorporated into each resource's existing conditions because they help explain the current condition of the resource; past and ongoing activities are also considered in cumulative effects in the context of how past or ongoing actions affect present conditions and how future actions increase, reduce, or do not change these conditions. Private land information was provided by Russ Lane, Oregon Department of Forestry (conversation notes in the Project Record); dates of private land treatment are estimated. This list includes all reasonably foreseeable projects expected to occur within each resources' defined scope of analysis (includes all projects that overlap each resources cumulative impact area).

Table J-1: Actions Considered in Cumulative Effects Analysis for the Flagtail Fire Recovery Project FEIS

Past				
Action	Description	Date		
Wildfire, associated fire suppression efforts, and fire line rehabilitation	Flagtail Fire burned about 8,200 acres (7,120 ac. on Malheur NF, 1,080 ac. private). Firefighters constructed 29 miles of fire lines (hand and mechanical); 7.6 miles of other line were also used; used 54 miles of road; constructed safety zone clearings and landing sites; vehicles opened closed roads, and drove cross-country; fire line rehabilitation including building/rebuilding	2002		
Timber harvest on National Forest System land	waterbars (see also Chapter 1, Background).  Harvest on about 3,650 acres; includes 14 acres of hazard tree removal in Bear Valley Work Center. Additionally, about 650 acres of hazard tree removal along roads occurred in 2002/2003 through the Roadside Hazard Tree Removal CE.	1974-2003		
Timber harvest on private land	Most of the forested land burned by the Flagtail Fire has had commercially valuable dead trees harvested (in accordance with the Oregon Forest Practices Act); few if any live trees removed. No known new roads built, but many new skid trails created during harvest. Sediment prevention (by methods including water barring) is required	2002-2003		
Reforestation on private land	Regeneration/conifer planting on private land that became non- stocked with trees has been planted with tree seedlings	2003		
Seeding on private land	Seeding primarily to reduce erosion with secondary benefit to domestic livestock and wildlife; plant mix unknown.	2002-2003		
Noxious weeds	Treatment of 4.2 acres in 22 noxious weeds sites near or within the analysis area.	1983 - 2001		
Precommercial thinning/fuels reduction	Approximately 200 acres (effects of precommercial thinning done prior to 1995 would no longer be discernible)	1995-2001		
Aspen fencing	In 2003, fences around 10 acres of aspen in 8 areas were rebuilt or maintained; fences were originally built between 1998-2001 and were burned in the fire.	1998-2003		

Past		
Action	Description	Date
Livestock grazing	While grazing permits are still in force in the analysis area, permittees were informed that livestock were not allowed to use the Flagtail Fire area in 2003. However, during the 2003 grazing season, permitted, but uncontrolled, livestock were present within the Flagtail Fire burned area perimeter for approximately 1 to 3 days per individual from 9/12 to 9/30. These animals lightly used portions of unburned meadows within the burned area perimeter. Uncontrolled livestock resulted from no physical barrier existing between the burned and unburned portions of the Swamp Creek unit within the Flagtail Allotment. Extensive riding by the permittee occurred during this period to minimize use of the burned portion of the Swamp Creek unit. In addition, a factor resulting in uncontrolled livestock was the burned unit/pasture perimeter fence along County Road 63. This resulted in some stray uncontrolled livestock trailing down County Road 63. The permittee repaired the fence and mitigated this secondary effect.	2003
Present and/or Ongoing	<u></u>	
Action	Description	Date
Fuels treatment, fuels reduction	Piling and burning of harvest-produced fuels and non-	2003-Ongoing
on private land	commercial sized dead trees	
National Forest roads	Use of approximately 138 miles of classified roads on National Forest System lands in the Analysis Area.	1950's-present
County Highway	Use and maintenance of Grant County Road 63 within the Analysis Area (under a Forest Road Development Agreement) and presence of noxious weeds.	Ongoing
Private roads	Use of approximately 2 miles of roads on private land in the burned area*; vehicle access is limited.	Ongoing
Private land	Private recreation use in the watershed including camping and hunting. Access is limited.	Ongoing
Forest trails	Management of forest trails including erosion work, route signing, and maintenance	Ongoing
Recreation use	Hunting; camping at dispersed camp sites; mushroom and "horn" hunting, Christmas tree harvest (expected to be minimal)	Ongoing
Recreation use	Snowmobiling (no groomed trails) December- February	Ongoing
Livestock grazing and management**	Domestic grazing and management of grazing in the Flagtail, Jack Creek, and Scotty Allotments within analysis area.	Ongoing
Personal use firewood**	Harvest to occur along open roads while adhering to Forest Firewood restrictions within RHCAs	Ongoing
Noxious weeds	Monitoring and treatment of noxious weeds in analysis area and other District areas.	Ongoing
Road maintenance	Cleaning culverts, blading existing roads, brushing right-of-ways	Ongoing
Aspen/wildlife fence	Replacing wire, broken poles, and broken sections of fence;	Ongoing
maintenance	cutting out fallen trees.	_
Routine inventory surveys	Surveying existing timber stands, streams, roads, aspen, etc.	Ongoing
Conifer and hardwood planting and protection	Conifer planting portion completed (native conifer trees were planted on about 190 acres of RHCAs and 190 acres of uplands to improve hydrologic and riparian conditions); hardwood (riparian) planting begun - hardwood cuttings and cottonwood seedlings planted on 25 acres (6.3 miles) along Silvies River, Jack, and Snow Creeks; interplanting with additional species not completed	Conifer completed 2003, hardwood ongoing

Present and/or Ongoing		
Action	Description	Date
Wood addition to channels	Place single pieces or aggregates of coarse woody material in	Ongoing
	about 27 miles of Flagtail Fire project area streams and	
	ephemeral draws where woody material is deficient or where	
	there is potential for active erosion to develop.	
Special Use Permit- Gander	Spring on FS property and water transmission from buried	Ongoing
Ranch spring development and	plastic pipe to a tank on private land to convey livestock water.	
water transmission line		
Hazard tree cutting***	Within the Flagtail Fire area, in Alt. 1 cutting would occur as an	Ongoing
	ongoing action	
Fire rehabilitation and	Monitoring of fire rehabilitation effectiveness, and subsequent	Ongoing
monitoring	treatment – ¼ acre to be seeded in Hog subw. in 2004	
Future		
Action	Description	Date
Timber harvest in Flagtail	Highway 395 and Forest Road 3925 Roadside Hazard Tree	2004+
Project Area Subwatersheds and	Removal; Forest Road 31 Roadside Hazard Tree Removal;	
Adjacent Subwatersheds	Flagtail Lookout	
Bald Hills erosion control	Place course wood in uplands to control erosion and slow runoff	2004+
	(which allows more water to percolate into the soil)	
Flagtail aspen enhancement	Fence an estimated 240 to 250 acres of aspen affected by the	2004+
(aspen fencing)	Flagtail Fire within the burn boundary. Live conifers under 21"	
	DBH may be removed as a wood product.	
Riparian fuel treatment	Reduce fuels to reduce the severity of future fires within the RHCAs.	Unknown

<sup>\*</sup>Miles of road as recorded in Forest Service GIS database; limited information on private land is available to the Forest Service.

\*\*\*Hazard tree cutting is considered an ongoing activity for the cumulative effects analysis of Alt. 1. Removal will not occur in Alt. 1. Cutting (Alt. 4) and cutting and removal (Alts. 2, 3, and 5) of hazard trees is part of those alternatives (as described in the FEIS Chapter 2, not as described in the Roadside Hazard Tree Removal CE); the effects are described in direct and indirect effects, not cumulative effects.

## **Narrative**

## Timber Harvest in Flagtail Project Area Subwatersheds and Adjacent Subwatersheds:

These are the only timber harvest projects planned in project area and adjacent subwatersheds (Malheur National Forest SOPA, Fall 2003). These projects are in the scoping and analysis stage. These activities are outside the cumulative effects area for all resources except Fire and Fuels, Terrestrial Wildlife, Watershed, Fisheries, Range, and Economics/Social.

**Highway 395 and Forest Road 3925 Roadside Hazard Tree Removal:** Removal of roadside hazard trees along about 7 miles along State Highway 395 from Vance Creek to Swick Creek and about 13 miles along Forest Road 3925 from the junction with 395 east to the junction of Forest Road 15. Approximately 240 trees would be felled, with about 80 of those removed as timber.

<sup>\*\*</sup>Through administrative decisions these activities have been temporarily discontinued to meet other resource needs (see Chapter 1, Actions Outside of this EIS to Address Recovery Needs). Grazing would resume no earlier than 2005; firewood cutting would resume after harvest is completed (expected to be 2005).

about 2 acres drains into the Wickiup Subwatershed.

**Forest Road 31 Roadside Hazard Tree Removal**: Removal of roadside hazard trees along about 15 miles of Forest Road 31 from the junction with County Road 63 south to the junction with Forest Road 37; about 90 trees are to be felled, with about 50 to be removed. **Flagtail Lookout**: Removal of trees blocking the view from the Flagtail Lookout, and reestablishment of a defensible fuel break around the lookout site. Project area is about 10 acres;

**Bald Hills Erosion Control:** place course wood in 3-5 acres of eroding uplands to control erosion and slow runoff (which allows more water to percolate into the soil).

**Flagtail Aspen Enhancement (aspen fencing):** Fence an estimated 240 to 250 acres of 76 inventoried aspen sites. Fences will be located up to 100 feet away from identified aspen trees to increase the size of individual aspen stands, expand their range within suitable habitat, and protect regeneration from big-game or domestic livestock. These stands have been affected by the fire to some degree, providing improved conditions for regeneration. Trees that are hazardous to project workers will be felled. Live trees smaller than 21 inches DBH that are creating unfavorable conditions for regeneration or that must be cut to align fence will be felled and may be removed for commercial wood products such as dimension lumber, post and poles, and fencing materials.

**Riparian Fuel Treatment:** Treat fuels on about 100 acres of forested RHCAs within the Flagtail Fire project area. Snags less than 8 inches DBH would be thinned, then hand piled and burned outside of riparian areas to reduce the severity of future fires.

Table J-2: Actions Not Considered in Cumulative Effects Analysis\* for the Flagtail Fire Recovery Project FEIS and the Justification for Elimination from Consideration

Action	Justification	Date
Mining	There are no records of mining (past, ongoing, or future) in the	
	area	
Timber harvest on private land	Future harvest is unknown, but none is expected at this time	
	(Pers. Com., Russ Lane, Oregon Department of Forestry).	
Prescribed Fire Management in	Except for the Flagtail Project, no prescribed fire in Project Area	
Flagtail Project Area	or adjacent subwatersheds is planned at this time (Malheur	
Subwatersheds and Adjacent	National Forest SOPA, Fall 2003)	
Subwatersheds		
Monument Fire Recovery	40 miles north and east of the Flagtail Fire area; well outside of	2004+
Project*	Cumulative Effects area for all but Economics/Social.	
Easy Fire Recovery Project*	36 miles north and east of the Flagtail Fire area; well outside of	2004+
	Cumulative Effects area for all but Economics/Social.	

<sup>\*</sup>As noted for Economics/Social, these projects were considered in cumulative effects.